



P. O. BOX 240 • 1621 KY HWY 40 W • STAFFORDSVILLE, KY 41256

RECEIVED

OCT 19 2010

PUBLIC SERVICE  
COMMISSION

October 18, 2010

Jeff R. Derouen, Executive Director  
Public Service Commission of the Commonwealth of Kentucky  
211 Sower Boulevard  
Frankfort, KY 40602-0615

RE: Case Number 2010-00335

Dear Mr. Derouen:

Enclosed for filing as supplement to our application for a Certificate of Public Convenience and Necessity, Case Number 2010-00335, are one original plus 10 copies of sections A through H of our RUS Broadband Initiatives Program (BIP) Application.

Please contact Susan Fairchild with any questions at 606-297-3501.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Preston", followed by a long horizontal line extending to the right.

Thomas E. Preston  
CEO/General Manager

Enclosures



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM	<b>Easygrants ID:</b> 5169
<b>Funding Opportunity:</b> Broadband Initiatives Program	<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.
<b>Task:</b> Submit Application - BIP	<b>Applicant Name:</b> Mr. Thomas E Preston

**Table of Contents**

**RECEIVED**

- A. General Application Information
- B. Co-Applicant or Consortium
- C. Community Anchor Summary
- D. Project Map
- E. Service Area Details
- F. Technology Detail
- G. Project Budget
- H. Self Scoring
- I. Uploads

OCT 19 2010  
PUBLIC SERVICE  
COMMISSION



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM		<b>Easygrants ID:</b> 5169	
<b>Funding Opportunity:</b> Broadband Initiatives Program		<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.	
<b>Task:</b> Submit Application - BIP		<b>Applicant Name:</b> Mr. Thomas E Preston	

**A. General Application Information**

<b>Applicant Information</b>	
<b>Name and Federal ID for Applicant</b>	
<b>DUNS Number</b>	008773343
<b>CCR # (CAGE)</b>	0B8G1
<b>Legal Business Name</b>	FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.
<b>Point of Contact (POC)</b>	SUSAN FAIRCHILD 6062973501 Ext. 115 susan@foothills.coop
<b>Alternate POC</b>	THOMAS E. PRESTON 6062973501 Ext. 111 tpreston@foothills.coop
<b>Electronic Business POC</b>	THOMAS E PRESTON 6062973501 Ext. 111 tpreston@foothills.coop
<b>Alternate Electronic Business POC</b>	RUTH CONLEY 6062973501 Ext. 131 ruthc@foothills.coop

<b>Name and Contact Information of Person to be Contacted on Matters Involving this Application:</b>	
<b>Prefix</b>	Mr.
<b>First Name</b>	Thomas
<b>Middle Name</b>	E
<b>Last Name</b>	Preston
<b>Suffix</b>	



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM		<b>Easygrants ID:</b> 5169	
<b>Funding Opportunity:</b> Broadband Initiatives Program		<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.	
<b>Task:</b> Submit Application - BIP		<b>Applicant Name:</b> Mr. Thomas E Preston	

<b>Telephone Number</b>	606-297-9111
<b>Fax Number</b>	
<b>Email</b>	tpreston@foothills.coop
<b>Title</b>	CEO/General Manager
<b>Business Mailing Address of Applicant</b>	1621 Kentucky Hwy 40 W    Staffordsville, KY 41256

**Additional Contact Information of Person to be Contacted on Matters Involving this Application:**

Project Role	Name	Phone	Email
Secondary Point of Contact	Mrs. Ruth , Conely	6062973501 131	ruthc@foothills.coop
Other Contact	Mr. Lonnie , Kelly	6062973501 118	lonnie@foothills.coop
Other Contact	Mr. Bob , Ward	6062973501 163	bob@foothills.coop
Other Contact	Mr. Bill , Montgomery	6152255242	bmontgomery@telplexus.com

**Environmental Point of Contact**

Prefix: Mr. Name: Montgomery, Bill Suffix: Telephone Number: 6152255242 Title: Vice President
---

**Additional Organization Information**



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM	<b>Easygrants ID:</b> 5169
<b>Funding Opportunity:</b> Broadband Initiatives Program	<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.
<b>Task:</b> Submit Application - BIP	<b>Applicant Name:</b> Mr. Thomas E Preston

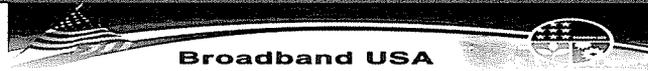
<b>Type of Organization</b>	Non-profit Corporation
<b>NON-CONFIDENTIAL: Summary of Organization</b>	Until the early 1950's, citizens of the rural areas of Johnson, Lawrence, and Magoffin Counties did not have a modern telephone system. Due to the foresight of some of the area citizens, Foothills Telephone Cooperative was incorporated on September 10, 1951. With this vision tuned to the people's needs in obtaining communication in their rural area, Foothills was formed. Since it's inception as a telecommunication force in Eastern Kentucky in the 50's, Foothills has been on the cutting edge of the latest technology bringing telephone, high-speed internet service, long distance, and, now, Cable TV to their customers.
<b>Is the organization a small business?</b>	No
<b>Does the organization meet the definition of a socially and economically disadvantaged small business concern as defined under section 8(a) of the SBA?</b>	No
<b>Congressional District of Applicant Headquarters</b>	Kentucky - 5
<b>If the applicant is a subsidiary, provide parent legal name</b>	
<b>If the applicant is a startup, name of entity with controlling interest</b>	

**Is the applicant delinquent on any federal debt?**

- No
- If Yes, justification for delinquency:

**Is the applicant a current or former RUS borrower or Grantee?**

- Yes



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM	<b>Easygrants ID:</b> 5169
<b>Funding Opportunity:</b> Broadband Initiatives Program	<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.
<b>Task:</b> Submit Application - BIP	<b>Applicant Name:</b> Mr. Thomas E Preston

**Is the applicant a current or past RUS Title II borrower?**

➤ Yes

<b>Authorized Organizational Representative</b>	
<b>AOR Name</b>	PRESTON, THOMAS
<b>AOR Email</b>	tpreston@foothills.coop
<b>Result</b>	Applicant Authorized

**Project Title and Project Description**

**NON-CONFIDENTIAL: Project Title:** Foothills Broadband Initiatives Project

**NON-CONFIDENTIAL: Project Description:** Fiber-to-the-premise/Last Mile construction project in parts of Magoffin and Lawrence counties in Kentucky.

**NON-CONFIDENTIAL: How many jobs will be created or saved from this project?** 326

**Project Type:** Last Mile

**Other Applications**

Are you or your co-applicants submitting any other applications during this round?

No

<b>Easygrants ID</b>	<b>Project Title</b>

If YES, please explain any synergies and/or dependencies between this project and any other applications.

**Other Project Information**

**Executive Summary of the proposed project**

GENERAL



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM		<b>Easygrants ID:</b> 5169	
<b>Funding Opportunity:</b> Broadband Initiatives Program		<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.	
<b>Task:</b> Submit Application - BIP		<b>Applicant Name:</b> Mr. Thomas E Preston	

Foothills Rural Telephone Cooperative Corporation, Inc. (FOOTHILLS), a Title II RUS borrower with headquarters in Staffordsville, KY, is an incumbent telephone operating company providing service in Johnson, Lawrence, and Magoffin Counties in eastern Kentucky. A small portion of its serving area also extends into Breathitt County. FOOTHILLS presently provides voice, data, and/or video services to approximately 14,398 subscribers in its serving area. The entirety of the FOOTHILLS serving area is rural, with only two communities listed in the 2000 Census, those being Salyersville with a population of 1,604 and Blaine with a population of 245. Neither of those communities is in the Proposed Funded Service Areas (PFSAs) addressed by this application.

FOOTHILLS has been actively building out Fiber-To-The-Home (FTTH), sometimes referred to as Fiber-To-The-Premises (FTTP), in its serving area since 2004. This construction has been utilizing both Title II RUS loans and general funds. FOOTHILLS has Fiber-To-The-Home construction underway at the present time that is being financed out of general funds. Presently in its network, FOOTHILLS has FTTH facilities available to over 9,000 dwellings passed and has approximately 7,000 customers subscribing to some combination of broadband data, video, or voice services over fiber. FOOTHILLS owns and operates its own video head end which is located near its headquarters.

**A. OPPORTUNITIES THE PROPOSED SYSTEM SEEKS TO ADDRESS**

This project will provide Fiber-To-The-Home (FTTH), also referred to occasionally as Fiber-To-The-Premises (FTTP), to portions of Lawrence and Magoffin Counties in the FOOTHILLS serving area. A small portion of Breathitt County will also be served. The Proposed Funded Service Areas (PFSAs) associated with this application lack access to high speed broadband data and do not have access to quality video feeds that include local content. Adding these services will provide opportunities for economic development. This should help offset the level of unemployment in these areas which is substantially above the national average.

**B. GENERAL DESCRIPTION OF PROPOSED FUNDED SERVICE AREAS (PFSAs)**

There are two PFSAs included in this application. Those are designated as the Lawrence PFSA and the Magoffin PFSA. These two PFSAs are totally rural, as is the entirety of the FOOTHILLS serving area. There are no communities designated in the 2000 Census located in these PFSAs.



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM	<b>Easygrants ID:</b> 5169
<b>Funding Opportunity:</b> Broadband Initiatives Program	<b>Applicant Organization:</b> Foothills Rural Telephone Cooperative, Corporation, Inc.
<b>Task:</b> Submit Application - BIP	<b>Applicant Name:</b> Mr. Thomas E Preston

The Lawrence PFSA is located in Lawrence County, in the northern portion of the FOOTHILLS service area, and borders on the state of West Virginia. It includes portions of three FOOTHILLS telephone exchange areas – Blaine, Chapman, and Fallsburg. Within these three exchanges, this PFSA includes the following Remote Service Areas (RSAs).

Blaine Exchange:

- Brammer Gap
- Cherokee
- Irish Creek
- Ledocio
- Needmore
- Rich Creek
- Webbville

Chapman Exchange:

- Busseyville
- Clifford
- Little Blaine
- Rockcastle
- Walbridge
- Walker Fork
- Yellow Creek

Fallsburg Exchange:

- Bear Creek
- Bucannon
- Cooksey Fork
- Deephole
- East Fork
- Glenwood
- Little Cat
- Morgan's Creek
- Roe Creek
- Seed Tick
- Spankem Branch
- Zelda



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM	<b>Easygrants ID:</b> 5169
<b>Funding Opportunity:</b> Broadband Initiatives Program	<b>Applicant Organization:</b> Foothills Rural Telephone Cooperative, Corporation, Inc.
<b>Task:</b> Submit Application - BIP	<b>Applicant Name:</b> Mr. Thomas E Preston

The Magoffin PFSA is located mainly in Magoffin County, with a small area in Breathitt County. This PFSA is located in the Royalton Exchange in the southwestern portion of the FOOTHILLS service area. It is comprised of the following RSAs.

Royalton Exchange:

- Arthurmable
- Carver Station
- Dry Bread
- Duco
- Evanston
- Fredville
- Gunlock
- Gypsy
- Puncheon Creek
- Tip Top
- Waldo

**C. HOUSEHOLDS AND BUSINESSES PASSED**

There is a total of 2,247 households passed and a total of 788 businesses passed in this proposed project.

**D. Critical Community Facilities and Public Safety Entities Passed**

There are eight (8) critical community facilities and public safety entities passed in this project. These include the Cherryville and Webbville volunteer fire departments, Lawrence County Conservation District office, Kentucky Department of Fish and Wildlife facility near Louisa, US Army Corps of Engineers facility near Fallsburg, Yatesville Lake State Park marina office, Yatesville Lake State Park campground, and the Kentucky Department of Transportation facility near Louisa.

**E. PROPOSED SERVICES AND APPLICATIONS TO BE PROVIDED TO USERS**

Services to be provided to subscribers in this FTTH project will be high-speed data access and video (including both broadcast and pay-per-view), as well as the existing voice service with CLASS features.



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM		<b>Easygrants ID:</b> 5169	
<b>Funding Opportunity:</b> Broadband Initiatives Program		<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.	
<b>Task:</b> Submit Application - BIP		<b>Applicant Name:</b> Mr. Thomas E Preston	

Various data packages will be offered depending upon speeds desired. Also, various video packages will be offered.

**F. TYPE OF BROADBAND SYSTEM DEPLOYED**

The access network will use FTTH technology to deliver broadband to subscribers. More particularly, the GPON (Gigabit Passive Optical Networking) standards will be utilized with 2.48 Gigabit rates downstream to the customer at 1490 nm wavelength and 1.2 Gigabit rates upstream at 1310 nm wavelength. Being a GPON system, these bit rates are shared among up to 32 subscribers who operate on the same PON (Passive Optical Network). The actual bit rate allocated to a subscriber on the PON can be controlled by both provisioning. If a particular user requires guaranteed constant bandwidth at very high rates, the PON serving that subscriber can be underequipped (smaller number of subscribers assigned to that PON). The OLT (Optical Line Termination) and ONT (Optical Network Termination) equipment used in the access network will be Alcatel. The video will be delivered via RF overlay at 1550 nm wavelength utilizing Cisco Prisma II equipment along with passive CWDM (Coarse Wavelength Division Multiplexer) devices to overlay the 1550 nm video onto the fiber with the 1490 nm voice/data in the downstream direction.

The transport network will utilize two parallel fiber rings. A 10 Gigabit Ethernet ring will transport data and voice between nodes in the network (either central offices or remote buildings). This 10 Gigabit Ethernet ring already exists in the FOOTHILLS network. OCCAM equipment is used to implement this 10 Gigabit ring. A 870 MHz video fiber ring implemented with Cisco Prisma II equipment running at 1550 nm wavelength will transport the video. 1 Gigabit Ethernet uplinks will be provided between the Alcatel OLT equipment and the OCCAM 10 Gigabit transport ring.

The Alcatel, Cisco, and OCCAM equipment has been selected because it is in use throughout the existing FOOTHILLS FTTH network, so the provisioning and support infrastructure is already in place. All access and transport equipment is based upon industry standards.

**G. ADDRESSING NON-DISCRIMINATION AND INTERCONNECTION OBLIGATIONS**



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM		<b>Easygrants ID:</b> 5169	
<b>Funding Opportunity:</b> Broadband Initiatives Program		<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.	
<b>Task:</b> Submit Application - BIP		<b>Applicant Name:</b> Mr. Thomas E Preston	

The proposed Fiber-To-The-Home system would be implemented in accordance with FOOTHILLS' existing broadband services and policies. In adherence to the principles stated in FCC policy statement FCC 05-151 with consideration for needs of law enforcement and reasonable network management, FOOTHILLS will provide on the portion of the network constructed with these requested funds an open and non-discriminate Internet access service applying no favoritism or priority to any lawful Internet applications or content. The acceptable use policy and service management procedures will be clearly displayed on all company websites. Customers will be notified of any changes in policy or procedure via email, and website content is updated accordingly.

Bona fide requests for interconnection with other service providers, on the portion of the network constructed with these requested funds, would normally be accomplished at one of the network nodes (central office or remote building) associated with this project, but can be accommodated at points in the access network where technically feasible without exceeding capacity limitations in pursuant to good faith negotiations by the applicant.

#### H. QUALIFICATIONS OF THE APPLICANT

Foothills Rural Telephone Cooperative Corporation, Inc. (FOOTHILLS) was formed as a telephone cooperative in 1951 and has been providing telecommunication services to residents of Lawrence, Johnson, and Magoffin Counties in eastern Kentucky ever since. When DSL (Digital Subscriber Loop) technology became economically available, FOOTHILLS began integrating that technology into their network to the point where 100% of their subscribers have access to DSL data capability -- but not at high speed broadband rates. In 2004 FOOTHILLS began construction of a FTTH network to initially overlay and eventually replace its existing copper access network. With this FTTH network FOOTHILLS constructed its own video head end and began to offer high quality video to subscribers within reach of their FTTH facilities. Presently approximately 9,000 of FOOTHILLS' 14,398 subscribers have access to those FTTH facilities and approximately 7,000 of those customers are subscribing to some combination of voice, data, or video over fiber.

FOOTHILLS maintains its own sales, marketing, customer service, technical support, and network maintenance for all aspects of its voice, data, and video service offerings. With its 6 years experience constructing, installing, and supporting FTTH technology and with its track record in growing and maintaining customers for its data and video offerings, FOOTHILLS is



**Broadband Infrastructure Application  
Submission to RUS -- Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM	<b>Easygrants ID:</b> 5169
<b>Funding Opportunity:</b> Broadband Initiatives Program	<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.
<b>Task:</b> Submit Application - BIP	<b>Applicant Name:</b> Mr. Thomas E Preston

eminently qualified to construct the plant and maintain the services associated with this proposed project.

**I. OPERATIONAL RELATIONSHIP WITH CO-APPLICANTS**

There are no co-applicants.

**J. OVERALL INFRASTRUCTURE COST OF THE BROADBAND SYSTEM**

The cost of the infrastructure associated with this project is \$20,972,482.99 (including engineering) and is broken out by category in Attachment 22, part a). The cost per premises passed is \$6,910.21.

**K. OVERALL EXPECTED CUSTOMER PROJECTIONS**

Based upon Foothills' experience with take rates on their previous FTTH deployments a take rate of 50% of premises passed is being projected over the 5 year period for some combination of data and video. Existing voice-only customers are not included in that number as they will remain on copper service until economics dictate migrating voice-only customers over to the fiber plant from the existing copper.

**L. NUMBER OF JOBS ESTIMATED TO BE CREATED OR SAVED**

Job estimates are as follows:

<b>Jobs Created - Short-Term (Design and construction period of 3 years)</b>	
Design, CAD, Field Engineering, Inspection	- 28
Construction (OSP)	- 100
Additional Cutover & Wiring (FRTCC)	- 10
 Total Short Term (3-Yr) Jobs	 - 138
 Jobs Created - Long Term (Permanent in Communities) Estimate	 - 188
 Total Jobs (Both Short and Long Term) Created or Saved	 - 326



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM	<b>Easygrants ID:</b> 5169
<b>Funding Opportunity:</b> Broadband Initiatives Program	<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.
<b>Task:</b> Submit Application - BIP	<b>Applicant Name:</b> Mr. Thomas E Preston

**Explanation of Long Term Job Estimate:**

Per estimates from Connected Nation in "The Economic Impact of Stimulating Broadband Nationally -- A Report from Connected Nation, Inc., February 21, 2008," a 7% increase in broadband adoption across the US would result in 2.4 million jobs.

The population of the US is approximately 300 million.

This is an increase of  $(2.4/300)$  or 0.8% of the population.

Estimated increase in broadband adoption (not same as take rate for service which will be much higher) for this project area should be a minimum of 28%.

Applying the estimates from Connected Nation to the local level and assuming that the jobs created or saved will equal to 0.8% of the population for every 7% increase in broadband adoption; then the number of jobs created or saved in this project area long term should be  $(28/7)*0.8%$  or 3.2% of the population. The population of this area, per the 2000 Census is 5,874. Therefore, the estimated jobs created or saved, long term, for this project area would be  $5,874 * 0.032 = 188$ .

**Is the applicant cooperating with any other Recovery Act Awards?**

➤ No

**If the answer to the above question is "Yes," description of Cooperation with other Recovery Act Awards:**

**Is the applicant seeking a waiver of the Buy American provision?**

➤ No

**If YES, click "Add" to provide your justification for the waiver:**

**B. Co-Applicant or Consortium**

Are you applying with any other key institutions, organizations, or other entities for this project?

➤ No

If YES, Co-Applicants are listed below:



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM		<b>Easygrants ID:</b> 5169	
<b>Funding Opportunity:</b> Broadband Initiatives Program		<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.	
<b>Task:</b> Submit Application - BIP		<b>Applicant Name:</b> Mr. Thomas E Preston	

### C. Community Anchor Summary

**NON-CONFIDENTIAL – Critical Community Facilities and Public Safety Entities**

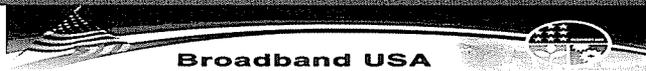
Schools (k-12)	0
Libraries	0
Medical and Healthcare Providers	0
Public Safety Entities	2
Public Housing	0
Institutions of Higher Education	0
Community Support Organization	0
Government Facilities	6
<b>Total Critical Community Facilities and Public Safety Entities</b>	<b>8</b>

### D. Project Map

**Project Map (Reference Number):** F9D9-D5E1-4EC9-AE2C

### E. Service Area Details

<b>Service Area Details</b>
<b>PFSA or Non-Funded:</b> Funded
<b>Name of Service Area:</b> LAWRENCE PFSA
<b>Total Population in Service Area:</b> 4495
<b>Total Households in Service Area:</b> 1737
<b>Total Businesses in Service Area:</b> 398



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM		<b>Easygrants ID:</b> 5169	
<b>Funding Opportunity:</b> Broadband Initiatives Program		<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.	
<b>Task:</b> Submit Application - BIP		<b>Applicant Name:</b> Mr. Thomas E Preston	

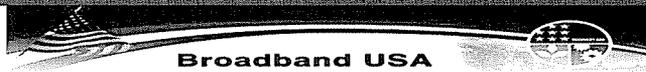
**Total Critical Community Facilities and Public Safety Entities in Service Area: 8**  
**Number of Unserved Households to be served in this Service Area: 0**  
**Premises within the rural portion of the service area, without access to 5 Mb service: 1462**  
**Total premises within the rural portion of the service area (including without access to 5 Mb service): 2143**  
**Total square miles within this service area: 209**  
**Total rural square miles within this service area: 209**  
**Shortest number of miles from non-rural area: 7**

**Methodology used to determine the classifications of the service areas: Rural Determination:**  
 The rural/non-rural determination for these areas was based upon information in the 2000 Census and the definition of "rural" as provided in the Round 2 Application Guide. There are no cities, towns, or incorporated areas of greater than 20,000 population in this PFSA. It should be noted that the largest town within all of the areas presently served by FRTCC is Salyersville (population 1,604) and that town is not in this PFSA. It should also be noted that there are no communities in this PFSA that are listed in the 2000 Census. The nearest "urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants" is 7 miles away on the outskirts of Huntington, WV.

**Without High Speed Access (WHS) Determination:**  
 FRTCC is the incumbent telephone operating company in this area, and the only provider of wireline broadband service. Other providers of broadband service in these areas (satellite and wireless providers) do not offer 5 MBPS service, as determined from analysis of their marketing materials and checking with their sales personnel. FRTCC serves this area with DSL technology, and the areas identified as WHSA do not have DSLAM equipment capable of supplying 5 MBPS service. It is worthwhile to note that the areas shown on the maps as having High Speed Access were so designated because they are served by DSLAMs that are capable of providing 5 MBPS over a limited distance. That distance is greatly dependent upon the quality of the copper plant, and it is known that some subscribers in these areas are not really capable of 5 MBPS. But, because of the difficulty in identifying and depicting on maps those WHSA portions of areas served by 5 MBPS DSLAMs, it was decided to classify those entire areas as having High Speed Access. Therefore, the maps as shown represent a very conservative determination of WHSA areas.

**Unserved Determination:**  
 No areas in this PFSA are classified as "unserved".

**PFSA or Non-Funded: Funded**  
**Name of Service Area: MAGOFFIN PFSA**  
**Total Population in Service Area: 1379**  
**Total Households in Service Area: 510**  
**Total Businesses in Service Area: 382**  
**Total Critical Community Facilities and Public Safety Entities in Service Area: 0**  
**Number of Unserved Households to be served in this Service Area: 0**  
**Premises within the rural portion of the service area, without access to 5 Mb service: 646**



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM	<b>Easygrants ID:</b> 5169
<b>Funding Opportunity:</b> Broadband Initiatives Program	<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.
<b>Task:</b> Submit Application - BIP	<b>Applicant Name:</b> Mr. Thomas E Preston

Total premises within the rural portion of the service area (including without access to 5 Mb service): 892  
Total square miles within this service area: 88  
Total rural square miles within this service area: 88  
Shortest number of miles from non-rural area: 45

**Methodology used to determine the classifications of the service areas: Rural Determination:**  
The rural/non-rural determination for these areas was based upon information in the 2000 Census and the definition of "rural" as provided in the Round 2 Application Guide. There are no cities, towns, or incorporated areas of greater than 20,000 population in this PFSA. It should be noted that the largest town within all of the areas presently served by FRTCC is Salyersville (population 1,604) and that town is not in this PFSA. It should also be noted that there are no communities in this PFSA that are listed in the 2000 Census. The nearest "urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants" is 45 miles away on the outskirts of Huntington, WV.

**Without High Speed Access (WHS) Determination:**  
FRTCC is the incumbent telephone operating company in this area, and the only provider of wireline broadband service. Other providers of broadband service in these areas (satellite and wireless providers) do not offer 5 MBPS service, as determined from analysis of their marketing materials and checking with their sales personnel. FRTCC serves this area with DSL technology, and the areas identified as WHSA do not have DSLAM equipment capable of supplying 5 MBPS service. It is worthwhile to note that the areas shown on the maps as having High Speed Access were so designated because they are served by DSLAMs that are capable of providing 5 MBPS over a limited distance. That distance is greatly dependent upon the quality of the copper plant, and it is known that some subscribers in these areas are not really capable of 5 MBPS. But, because of the difficulty in identifying and depicting on maps those WHSA portions of areas served by 5 MBPS DSLAMs, it was decided to classify those entire areas as having High Speed Access. Therefore, the maps as shown represent a very conservative determination of WHSA areas.

**Unserviced Determination:**  
No areas in this PFSA are classified as "unserved".

## F. Technology Detail

### Technology Feasibility

Indicate the technology that will be used to deliver services. The following items were selected:

Wireline - Fiber-optic Cable



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM	<b>Easygrants ID:</b> 5169
<b>Funding Opportunity:</b> Broadband Initiatives Program	<b>Applicant Organization:</b> Foothills Rural Telephone Cooperative, Corporation, Inc.
<b>Task:</b> Submit Application - BIP	<b>Applicant Name:</b> Mr. Thomas E Preston

**Other:**

<b>Technology Questions</b>
-----------------------------

**Description of Network Openness**

**NONDISCRIMINATION AND INTERCONNECTION**

On all portions of the network constructed with funds associated with this application, Foothills Rural Telephone Cooperative Corporation (FRTCC) will:

- a) adhere to the principles contained in the FCC's Internet Policy Statement (FCC 05-151, adopted August 5, 2005) or any subsequent ruling or statement;
- b) not favor any lawful Internet applications and content over others;
- c) display any network management policies in a prominent location on the service provider's Web page and provide notice to customers of changes to these policies;
- d) connect to the public Internet directly or indirectly, such that the project is not an entirely private closed network; and
- e) offer interconnection, where technically feasible without exceeding current or reasonably anticipated capacity limitations, on reasonable rates and terms to be negotiated in good faith with requesting parties. This includes both the ability to connect to the public internet and physical interconnection for the exchange of traffic.

Foothills will bring interconnected traffic from the funded service area back to our main central office where access to other carrier networks is available. Foothills will also assist the interconnected party in connecting to their own middle mile provider. Negotiations for transit costs over said middle mile provider will be up to interconnected party. Foothills will provide floor space in their central office at reasonable terms.

**G. Project Budget**

<b>Project Budget</b>
-----------------------

Budget	Loan Request	Grant Request	Equity	Non-RUS Debt	Bond	Other
Network & Access Equipment	346,716	809,005	10,000			



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM		<b>Easygrants ID:</b> 5169	
<b>Funding Opportunity:</b> Broadband Initiatives Program		<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.	
<b>Task:</b> Submit Application - BIP		<b>Applicant Name:</b> Mr. Thomas E Preston	

<b>Outside Plant</b>	<b>4,419,453</b>	<b>10,312,058</b>				
<b>Buildings and Land</b>			<b>33,000</b>			
<b>Customer Premise Equipment</b>	<b>330,165</b>	<b>770,385</b>	<b>803,030</b>			
<b>Billing and Operational Support Systems</b>						
<b>Operating Equipment</b>						
<b>Professional Services</b>	<b>1,195,410</b>	<b>2,789,290</b>				
<b>Testing</b>						
<b>Site Preparation</b>						
<b>Other</b>						
<b>TOTAL</b>	<b>6,291,744</b>	<b>14,680,738</b>	<b>846,030</b>			

**Total Capital Project Budget:** \$21,818,512  
**Total Requested Award:** \$20,972,482  
**Grant Percentage of Total Award:** 70.0%

**Is the applicant seeking a waiver of the 75-25 grant-to-loan ratio?** No

**If Yes, justification for the waiver:**

**Premises Passed (from Proposed Funded Service Areas):** 3,035  
**Cost per Premesis Passed:** \$6,910

**Is the applicant seeking a waiver of the \$10,000 per premise passed requirement? (Last Mile only):** No

**If Yes, justification for the waiver:**



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM		<b>Easygrants ID:</b> 5169	
<b>Funding Opportunity:</b> Broadband Initiatives Program		<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.	
<b>Task:</b> Submit Application - BIP		<b>Applicant Name:</b> Mr. Thomas E Preston	

### H. Self Scoring

Criteria	Method	Points	Self Score
Proportion of Rural Residents Served in Unserved Areas	Points will be awarded for serving rural residents located in unserved areas. For every 10 percent of unserved households compared to the total households to be served that will receive broadband service, 1 point will be awarded up to a maximum of 10 points. For Middle Mile projects, this will be based on the location of the interconnection points.	0 - 10	0
Rural Area Targeting	Points will be awarded for exceeding the 75 percent rural area service requirement. For every five percent increase in the total proposed funded service area that is above the 75% rural requirement, 2 points will be awarded up to a maximum of ten points. For MM projects, this will be based on the location of the interconnection points.	0 - 10	10
Distance from Non-Rural Areas	One point will be awarded for each additional 10 miles that at least one proposed funded service area is located away from the closest non-rural area, up to a total of five points. For applicants with multiple service areas, this calculation will be based on the service area closest to the non-rural area. For MM projects, this will be based on the location of the interconnection points.	0 - 5	0
Title II Borrowers	Eight points will be awarded to applications which are submitted by entities which have borrowed under Title II of the RE Act.	0 or 8	8
Other Recovery Act Awards	Five points will be awarded for any cooperation with a Recovery Act award.	0 or 5	0
Performance of the offered service	<u>For Last Mile Projects:</u> For wireline projects that are constructed to deliver a minimum of 5 Mbps service to the premises (upstream and downstream combined), 5 points will be awarded. For wireline projects that are constructed to deliver a minimum of 20 Mbps service to the premises (upstream and downstream combined), 10 points will be awarded. For wireless projects that are constructed to deliver a minimum of 3 Mbps service to the end user (upstream and downstream combined), 8 points will be awarded. For mobile wireless projects that are constructed to deliver a minimum of 3 Mbps service to the end user (upstream and downstream combined), 10 points will be awarded. Scoring will be based on the predominant technology used for combination systems. <u>For Middle Mile Projects:</u>	0, 5, 8, or 10	10



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM		<b>Easygrants ID:</b> 5169	
<b>Funding Opportunity:</b> Broadband Initiatives Program		<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.	
<b>Task:</b> Submit Application - BIP		<b>Applicant Name:</b> Mr. Thomas E Preston	

Criteria	Method	Points	Self Score
	For middle mile projects that are constructed to deliver 100 Mbps service to all interconnection points in their network, 10 points will be awarded.		
Services to Critical Community Facilities and Small Disadvantaged Businesses	Points will be awarded to applications that are proposing to offer discounted rate packages to all critical community facilities in the proposed funded service area(s) that are at least 25 percent lower than the proposed base rate packages for at least three years, 4 points will be awarded. for Critical Community Facilities. For applications that are proposing to offer discounted rate packages to disadvantaged small businesses under section 8(a) of the SBA, 2 points will be awarded.	0,2, 4, or 6	6
Applicant's organizational capability	Up to ten points will be awarded based on the strength of the project's management team. RUS will evaluate past performance and accomplishments and award points accordingly. Details of these requirements will be in the Application Guide.	0 - 10	10
Small Disadvantaged Businesses	Three points will be awarded to applicants that meet the definition of a socially and economically disadvantaged small business concern under section 8(a) of the SBA.	0 or 3	0
Leverage of outside resources	Up to 10 points will be awarded based on the amount of outside resources contributed to the total financing provided under BIP: a. 10 points if this ratio is greater than 100%. b. 7 points if this ratio is between 99% and 75%. c. 5 points if this ratio is between 74% and 50%. d. 3 points if this ratio is between 49% and 25%. e. 0 points if the ratio is less than 25%. Outside resources are limited to new investments that are proposed to support the project and do not include any existing assets that the Applicant already owns or has rights to or any revenues generating from the operations.	0, 3, 5, 7, and 10	0
Extent of grant funding	Up to 15 points will be awarded based on the amount of grants funds requested in relation to the total amount of the award requested.	0, 5, 10, and 15	5



**Broadband Infrastructure Application  
Submission to RUS – Broadband Infrastructure Program**

<b>Submitted Date:</b> 3/26/2010 6:46:49 PM		<b>Easygrants ID:</b> 5169	
<b>Funding Opportunity:</b> Broadband Initiatives Program		<b>Applicant Organization:</b> FOOTHILLS RURAL TELEPHONE COOPERATIVE, CORPORATION, INC.	
<b>Task:</b> Submit Application - BIP		<b>Applicant Name:</b> Mr. Thomas E Preston	

Criteria	Method	Points	Self Score
	a. 0 points if requesting a grant greater than 70%. b. 5 point if requesting a grant between 70 and 51%. c. 10 points if requesting a grant between 50 and 16%. d. 15 points if requesting a grant between 15 and 0%.		
Cost Effectiveness	For Last Mile projects only, up to 8 points will be awarded for projects that promote cost effectiveness of federal assistance, based on cost per premise passed. To calculate the cost per premise passed, the applicant shall divide the total award requested in the application by the total number of premises passed. a. 2 points if cost per premise passed is less than \$8,000. b. 4 points if cost per premise passed is less than \$7,000. c. 6 points if cost per premise passed is less than \$6,000. d. 8 points if cost per premise passed is less than \$5,000.	0, 2, 4, 6 and 8	4
Total		100	53